

light transmission means is provided with a coat of magnetic material or is located within a close-fitting magnetic tube.

- 5 31. A scanning apparatus comprising:
  - an X drive for driving a light transmission means
  - an X drive for driving a light transmission means
  - having an exit tip in an X direction;
  - a Y drive for driving a light transmission means
  - 10 having an exit tip in a Y direction;
  - an X drive input signal generator for providing
  - an X drive input signal; and
  - a Y drive input signal generator for providing a
  - Y drive input signal modulated by a modulating signal
  - 15 derived from said X drive input signal;
  - wherein said exit tip executes a scan pattern
  - when driven simultaneously by said X drive and said Y
  - drive.
- 20 32. A scanning apparatus comprising:
  - an X drive for driving a light transmission means
  - having an exit tip in an X direction;
  - a Y drive for driving a light transmission means
  - having an exit tip in a Y direction;
  - 25 an X drive input signal generator for providing a
  - square wave X drive input signal; and
  - a Y drive input signal generator for providing a
  - Y drive input signal by generating a sawtooth signal and
  - modulating said sawtooth signal with a modulating signal
  - 30 derived from said X drive input signal;
  - wherein said exit tip executes a scan pattern
  - when driven simultaneously by said X drive and said Y
  - drive.
- 35 33. An apparatus as claimed in claim 31, wherein said
- scan pattern is elliptical and has an eccentricity that is
- always greater than zero.